Perceived Impacts of the Norman Wells Project on Social Conditions and Native Peoples

Report 5-85

Prepared for:

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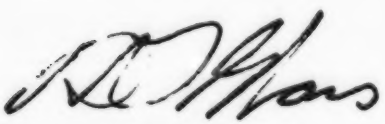
PREFACE

In 1982, the Department of Indian Affairs and Northern Development began its socio-economic impact monitoring program in connection with the Norman Wells Oilfield Expansion and Pipeline Project. This program, carried out under the direction of Professor R.M. Bone of the University of Saskatchewan, is, we believe, the first of its kind. Focussing on four Mackenzie Valley communities in the vicinity of the Norman Wells Project, this study was specially designed to allow monitoring of selected social and economic impacts through field surveys done before, during and after construction. The objective of the first field program, carried out in 1982, was acquisition of the baseline data, while the 1983 and 1984 field surveys captured the situation during the active construction phase. The 1985 fieldwork, done for the first time in all four of the survey communities by native organizations, provided the picture for the immediate post-construction period.

Various aspects of the 1982-84 portion of the project were analysed in the 1984 series of reports. This series discusses certain perspectives from the 1985 work, and, as well, deals with changes in selected factors between 1982 and 1985. In a subsequent, and final, series subjects dealt with will include the overall impacts of the Norman Wells Project and a discussion of the monitoring of socio-economic impacts in Canada.



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Director General
Constitutional Development and
Strategic Planning Branch

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BACKGROUND TO THE NORMAN WELLS SOCIO-ECONOMIC IMPACT MONITORING PROGRAM

In mid-1979, Esso Resources Canada Ltd. and Interprovincial Pipeline Ltd. initiated discussions with the federal government concerning a major resource development project in the Mackenzie Valley in the Northwest Territories. This project, the Norman Wells Oilfield Expansion and Pipeline Project, was designed to increase production of oil at Norman Wells and carry this increased production through a small diameter pipeline from Norman Wells to Zama, Alberta to connect with the national oil pipeline system. The proposed project was brought to the attention of people in the Mackenzie Valley communities through community information meetings arranged by the companies and designed to inform local residents and businessmen of the potential job and contract opportunities associated with project construction.

During 1980, public hearings were held in northern communities by both the Federal Environmental Assessment and Review Office and by the National Energy Board. These public hearings provided a forum for individuals, native organizations, village councils, government agencies, companies and special interest groups to present their views on the proposed project and the implications of such development for the North and native peoples. The question of involvement of northern residents and businesses in the Norman Wells Project was of major concern during the public hearings, and both the federal and territorial governments indicated that the degree of northern participation in the project would be a key factor in their consideration of whether to approve or reject the Norman Wells Project. On July 30, 1981, the federal government announced its approval, subject to a two-year delay in the commencement of construction to allow government, the companies and northerners time to prepare for their participation in this project.

In early 1982, the Department of Indian Affairs and Northern Development recognized the need to monitor the impacts of the project on the four communities located along the pipeline route. These communities, Norman Wells, Fort Norman, Wrigley and Fort Simpson, were regarded as the ones most likely to receive the bulk of the socio-economic impacts caused by the construction of the Norman Wells Project. All of the socio-economic impacts had potentially positive and negative effects on the communities and local people, and the monitoring program was intended to capture these and evaluate them against the background of pre-construction baseline data on selected indicators.

Carried out by the Department of Geography of the University of Saskatchewan under the direction of Dr. Robert M. Bone, the monitoring program consisted of gathering data from local residents on their household and business characteristics over the course of the construction phase. The framework for this work consisted of three parts: (1) pre-construction phase; (2) construction phase; and (3) a post-construction phase. The field work and data preparation took place from 1982 to 1986. A series of reports based on the data may be obtained from the Department of Indian Affairs and Northern Development.

1. INTRODUCTION

The impact of an industrial project on social conditions in the study communities is a difficult area to assess. When using a questionnaire format, this problem is compounded by (1) the rigid structure of a questionnaire; and (2) the possible insensitivity of such personal questions. For instance, social problems such as alcoholism, crime and family problems cannot be adequately dealt with by a questionnaire format at the household level. For this reason, two approaches were utilized by the Norman Wells Socio-Economic Impact Monitoring Program to assess the social impacts of the Norman Wells Project. The first was to review available data from the GNWT in order to evaluate it as a potential secondary source. It was concluded that these data have serious deficiencies but would be suitable in a supportive role to supplement primary data collection (Brown, Report 6-84, 1984).

The second approach was the insertion of two questions into the perception section of the household questionnaire. These two questions were designed to (1) assess the perceived social impacts of the Norman Wells Project on each of the study communities; and (2) assess the perceived overall impact, social and economic, on the Native people in the region. The responses to these two questions from the 1985 household questionnaire form the basis of this report.

2. PERCEIVED SOCIAL IMPACTS OF THE NORMAN WELLS PROJECT

In attempting to assess the social impact of the Norman Wells Project on each of the study communities a two part question was used. In the first part the respondents were asked to assess the overall social impact on their community. The second part of the question involved rating the impact that the construction of the Norman Wells Project had had on their community in terms of several potential impact areas. In this section the responses to this two part question will be examined.

2.1 Overall Social Impact

The first part of the social impact question related to the overall social impact that the construction of the Norman Wells Project had on each community. The respondents were asked to mark their perceptions of the social impact of the project on a Likert style line. The question read:

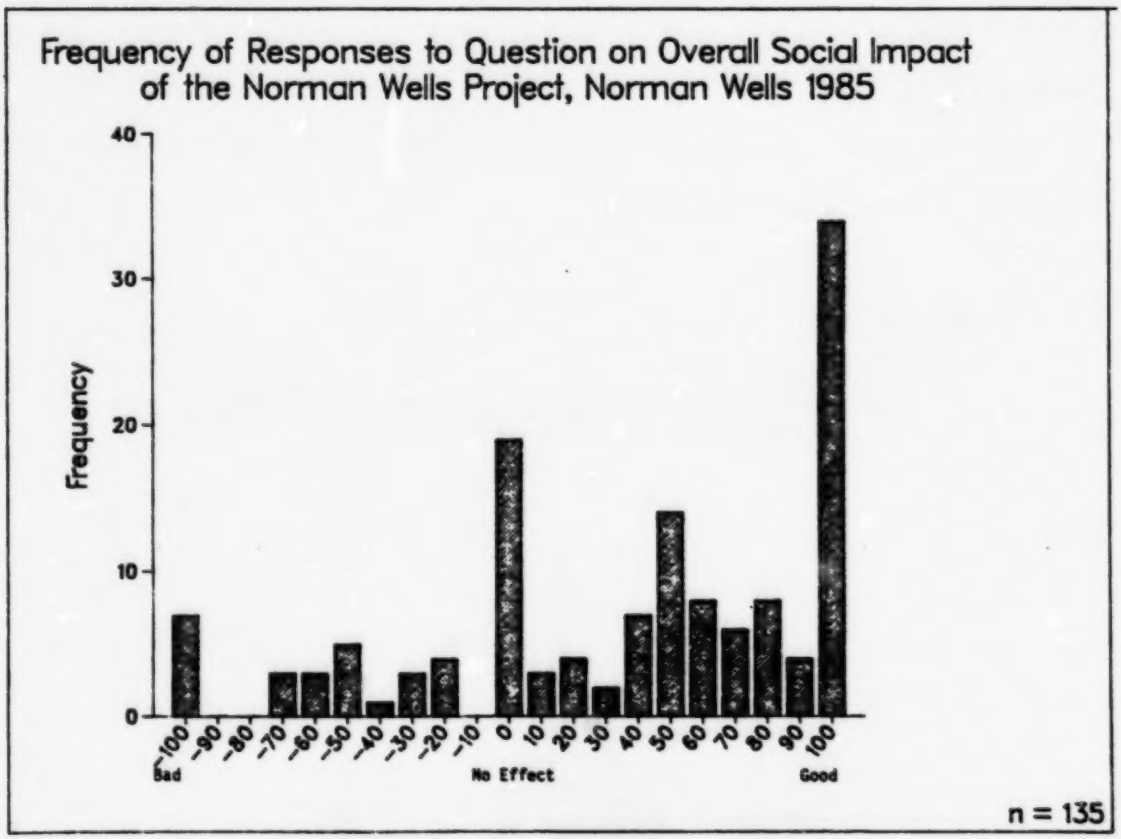
> In social terms, what effect has the construction of the Norman Wells Project had on your community?
>
> -100 0 100
> ¦----------¦
> Bad No Effect Good

To quantify the responses the Likert line was divided into twenty sections and the value of the response was coded for entry into the data set. Histograms which indicate the frequencies of each response are examined for each community in this section.

Norman Wells

It is apparent from Figure 1 that the residents of Norman Wells generally felt that the construction of the Norman Wells Project had a good effect on their community. This figure indicates that under 20% of the 135 respondents perceived the Norman Wells Project to have a negative social impact on their community.

Figure 1

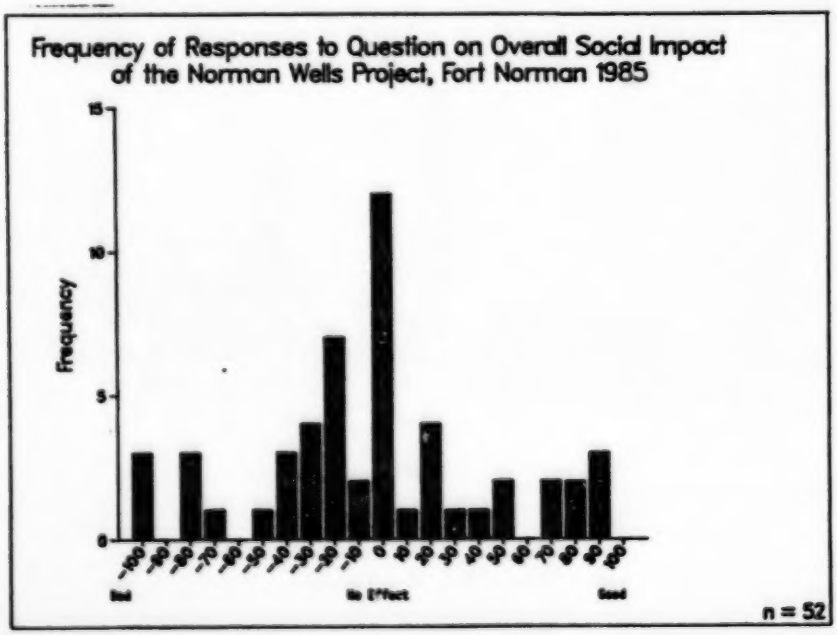

Frequency of Responses to Question on Overall Social Impact of the Norman Wells Project, Norman Wells 1985
Frequency
40
30
20
10
0
-100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100
Bad
No Effect
Good
n = 135

Approximately 14% of the respondents felt that the construction of the Norman Wells Project had "no effect", or at least no net effect, on the social conditions of Norman Wells. However, two-thirds of the respondents rated the effect of the Norman Wells Project towards the "good" end of the Likert continuum. As well, over 25% of the heads of households in Norman Wells marked the overall social effect on the +100 section.

Fort Norman

In Fort Norman there were obviously mixed emotions on the social effect that the Norman Wells Project had on their community (Figure 2). Approximately 46% of the 52 heads of households rated the social effect of the project towards the negative end of the continuum.

Figure 2

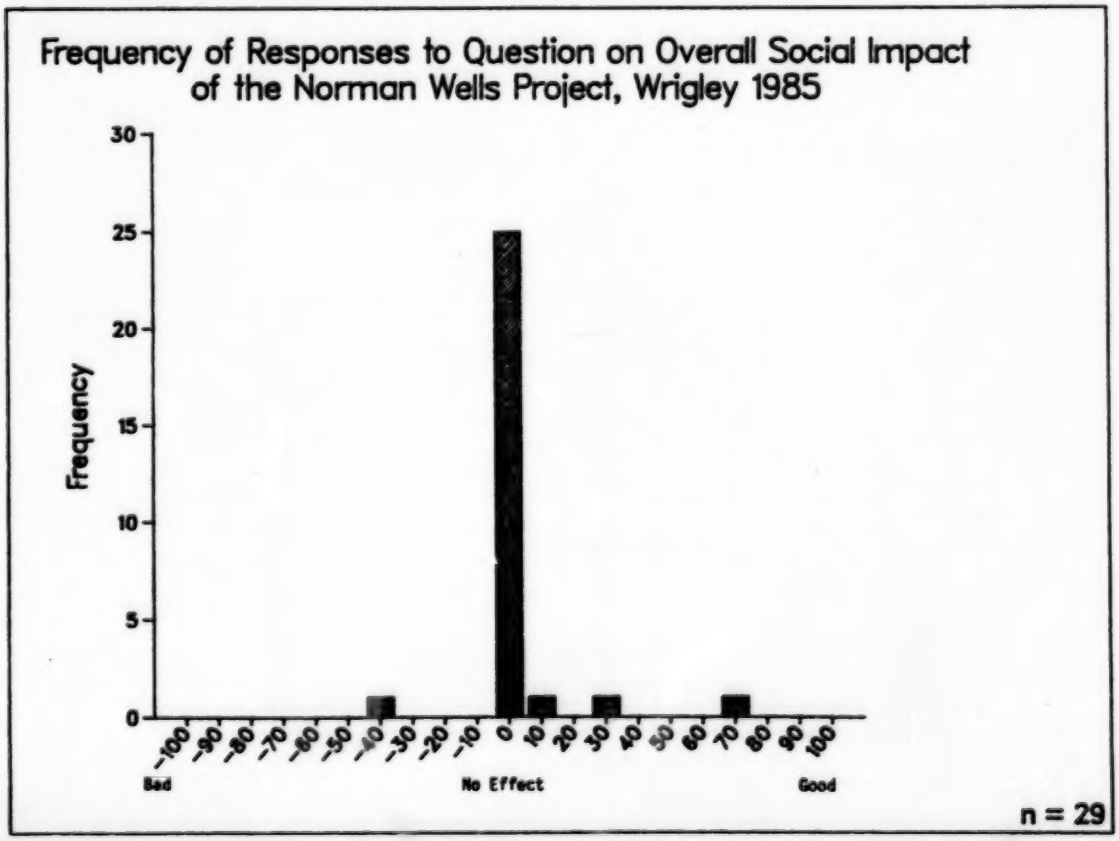

Frequency of Responses to Question on Overall Social Impact of the Norman Wells Project, Fort Norman 1985
Frequency
15
10
5
0
-100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100
Bad
No Effect
Good
n = 52

This compares with 31% of the respondents who rated the overall social impact as positive. It is clear from Figure 2, however, that the majority of Fort Norman residents felt that the Norman Wells Project had little social impact on their community. About one-quarter of the respondents marked the line at the "no effect" point and 50% of the responses fall within two of this point.

Wrigley

There is little doubt how the residents of Wrigley perceived the overall social impacts of the construction of the Norman Wells Project on their community (Figure 3).

Figure 3

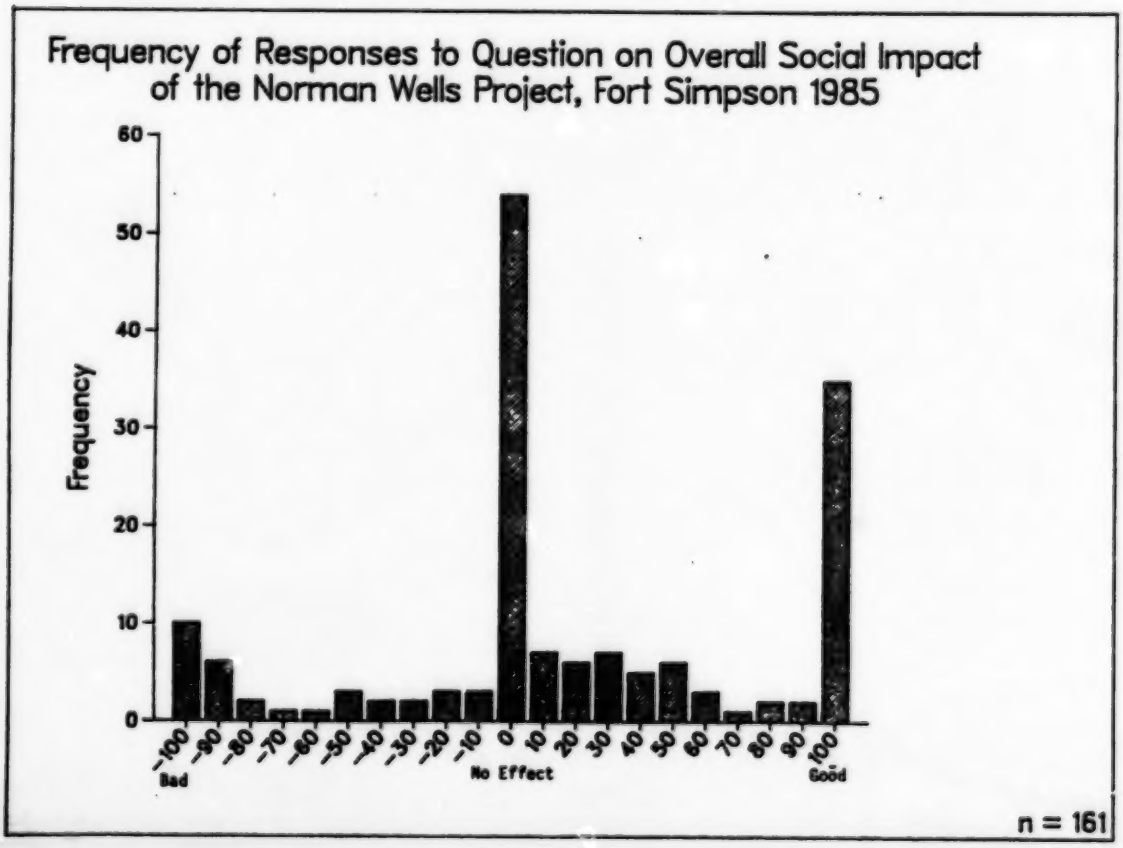


Over 86% of the 29 heads of households in this traditional native community responded that the Norman Wells Project had no overall social effect on their community.

Fort Simpson

In Fort Simpson, the general opinion is more divided on the social impact of the Norman Wells Project on this community. Over one-third of the 161 heads of households suggested that there was no overall social effect on Fort Simpson (Figure 4). Only 21% of the respondents felt there was a negative social effect from the project.

Figure 4



It is apparent in Figure 4 that there was also a substantial portion of the population who felt that the Norman Wells Project had a "good" social effect on Fort Simpson (22%). It is interesting to note that 89% of the heads of households who rated the social effect of the project at the "good" point were native.

The above histograms suggest that the residents of Norman Wells are the only ones to feel that the Norman Wells Project had a strong social impact on their community. Norman Wells respondents generally feel that the social effect was good for their community. In the three native communities of Fort Norman, Wrigley and Fort Simpson the heads of households generally seem to perceive little social impact from the construction of the Norman Wells Project. Although there was some variance from this view, particularly at Fort Simpson, this certainly was the most common perception among the residents of these communities.

2.2 Specific Potential Social Impacts

After responding to the overall social impact of the Norman Wells Project, respondents were asked to identify the level of impact experienced in eight potential social impact areas. There were five negative social impact areas and three positive social impact areas provided for the respondents to rate. The respondents rated each of the following as having a (1) strong effect; (2) some effect; (3) no effect; or (4) decreased effect:

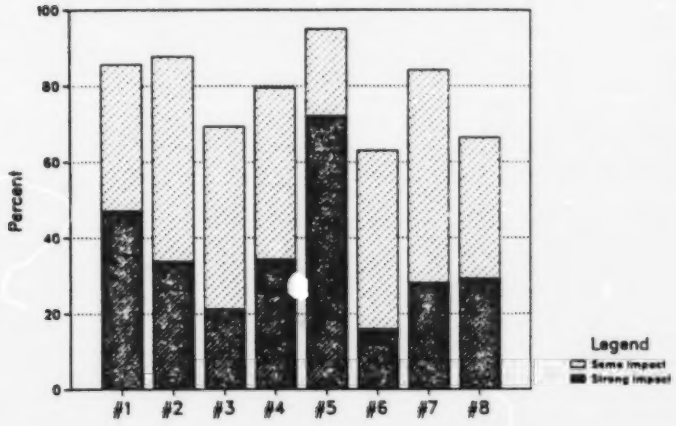
1. Increased alcohol/drug abuse.
2. Improved community facilities/services.
3. Increased family problems/breakdown.
4. Provided job experience/training.
5. More transients.
6. Increased crime.
7. Increased number of permanent residents/stability.
8. Overused community facilities.

In addition to these specific impact areas, space was provided for the respondents to add any impacts which they felt were worthy of mention.

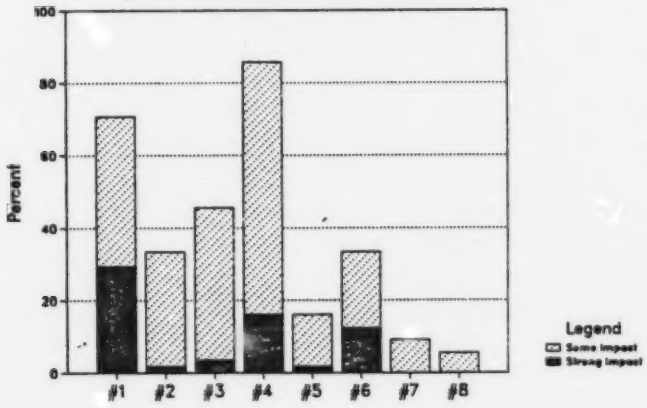
The responses to the specific areas of social impact are shown in graphic form in Figure 5 and Figure 6. The overall height of the bars reveals the percentage of households which perceived each specific impact as having either some or a strong effect on their community. The more darkly shaded portion of the bar indicates the percentage of the households feeling each specific impact had a strong effect on their community. When comparing the four study communities it is clear that Norman Wells residents perceived a much greater impact on their community than did the residents of the other three communities. Fort Simpson residents also perceived that their community was relatively strongly impacted while Fort Norman and Wrigley felt their communities were not impacted to a very high degree.

Figure 5

Perceived Social Impacts of the N.W.P.
by the Residents of Norman Wells



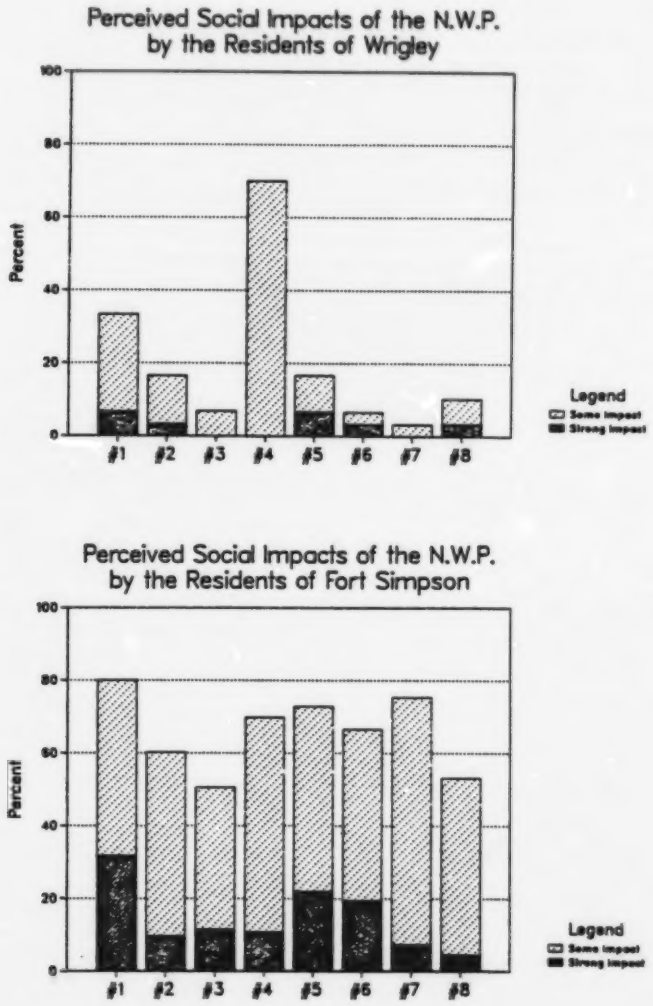
Perceived Social Impacts of the N.W.P.
by the Residents of Fort Norman



LEGEND FOR PERCEIVED SOCIAL IMPACTS
OF THE NORMAN WELLS PROJECT

#1 Increased alcohol/drug abuse.
#2 Improved community facilities/services.
#3 Increased family problems/breakdown.
#4 Provided job experience/training.
#5 More transients.
#6 Increased crime.
#7 Increased no. of permanent residents/stability.
#8 Overused community facilities.

Figure 6



LEGEND FOR PERCEIVED SOCIAL IMPACTS
OF THE NORMAN WELLS PROJECT

#1 Increased alcohol/drug abuse.
#2 Improved community facilities/services.
#3 Increased family problems/breakdown.
#4 Provided job experience/training.
#5 More transients.
#6 Increased crime.
#7 Increased no. of permanent residents/stability.
#8 Overused community facilities.

In Norman Wells, all eight areas of potential impact were perceived by over 60% of the households as having either some or a strong effect on Norman Wells. Two of the potential negative social impacts deserve specific mention. First, 95% of the households felt transients were a social impact of the Norman Wells Project. Over 70% felt transients had a strong impact on Norman Wells and this is not surprising given that the population of Norman Wells has risen from 420 in 1981 to nearly nearly 700 in 1985. As well, up to 1,000 project workers lived in work camps at Norman Wells which would also add to the perception of increased transients. The second negative social impact that the residents of Norman Wells perceived to have a strong impact on their community was increased alcohol and drug abuse. Nearly 86% of the residents felt that this was a social impact of the Norman Wells Project. There was one positive social impact which merits mention, 89% of the households felt that community facilities or services were improved as a result of the Norman Wells Project.

Fort Simpson also felt that the Norman Wells Project had some specific negative social effects on their community. The one area which stands out as a specific impact area was increased alcohol and drug abuse. Approximately 80% of the respondents felt this had an effect on their community as a result of the construction of the Norman Wells Project with many feeling this was a strong impact on Fort Simpson (35%). The two other areas of strong effects of the Norman Wells Project identified by Fort

Simpson residents were increased transients (22%) and increased crime (20%).

Wrigley and Fort Norman respondents felt that the Norman Wells Project had little social impact on their community. Clearly Fort Norman residents identified higher impact levels than Wrigley, but these levels are much lower than either Fort Simpson or Norman Wells. Two areas merit mention from each of these communities. The job experience and training provided as a result of the Norman Wells Project was seen as the highest impact area in each community. Over 85% of the households felt this was a social impact in Fort Norman. Although no one in Wrigley felt job experience and training constituted a strong impact of the project, most (70%) felt that job experience and training had some impact on their community. This positive social impact is at a much higher level than any of the other potential areas of impacts that were provided. The only other area which the residents saw as a relatively strong impact was again increased alcohol and drug abuse. Increased alcohol and drug abuse was identified as an impact of the Norman Wells Project by 71% of the residents of Fort Norman and 33% of the residents of Wrigley.

The one important theme that runs through the data for all four communities is the problem of alcoholism. It is clear that this social problem is perceived as the most significant negative social impact of the construction of the Norman Wells Project.

Regardless of the source of this problem or the aggravation of it, alcoholism is the most major social problem facing the communities of the Mackenzie Valley in the future.

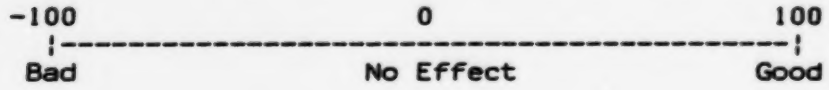
3. PERCEIVED IMPACT ON THE NATIVE PEOPLE OF THE REGION

The responses to the question on the overall impact, social and economic, of the Norman Wells Project on native people in the Central Mackenzie Valley is now examined. The question was similar in structure to the social impact question with a Likert line for overall impact, i.e., good or bad and then the provision of several potential impact areas with the respondents suggesting whether each had had a (1) strong effect; (2) some effect; (3) no effect; or (4) decreased effect. As with the social impact question the potential impact areas included both positive and negative impacts.

3.1 Overall Impact on Native People

The question to assess the overall or "net" impact, economic and social, of the Norman Wells Project to native people in the region read as follows:

Overall, what effect has the construction of the Norman Wells Project had on Native Peoples?



The responses from this question were quantified and in this section histograms of the overall responses for each community will be examined.

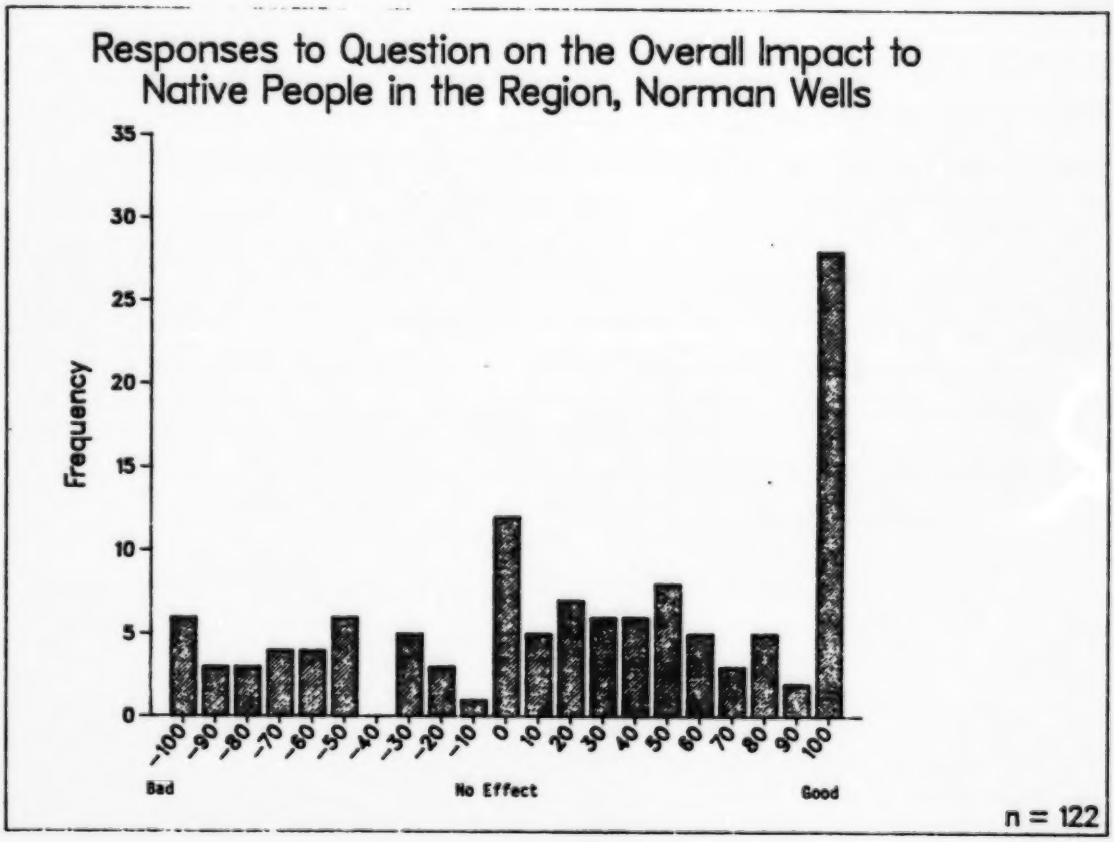
An important point to note when reading this section is that a response of "no effect" is not interpreted as meaning there were no impacts from the construction of the Norman Wells Project. Rather this question asks the overall impact of the project on native people which involves the weighing of the positive and negative economic and social impacts. Thus a response of "no effect" may be more appropriately called "no net effect". Throughout this section the terms "no effect" or "little impact" will appear but it is important to remember that these refer to the net effects or impacts. This distinction is revealed in the next section when the specific potential impact areas are examined.

Norman Wells

The residents of Norman Wells feel that the Norman Wells Project has been good for native people in the region (Figure 7). Over 60% of the heads of households in Norman Wells responded

towards the "good" end of the continuum with 29% on the "bad" end of the continuum.

Figure 7

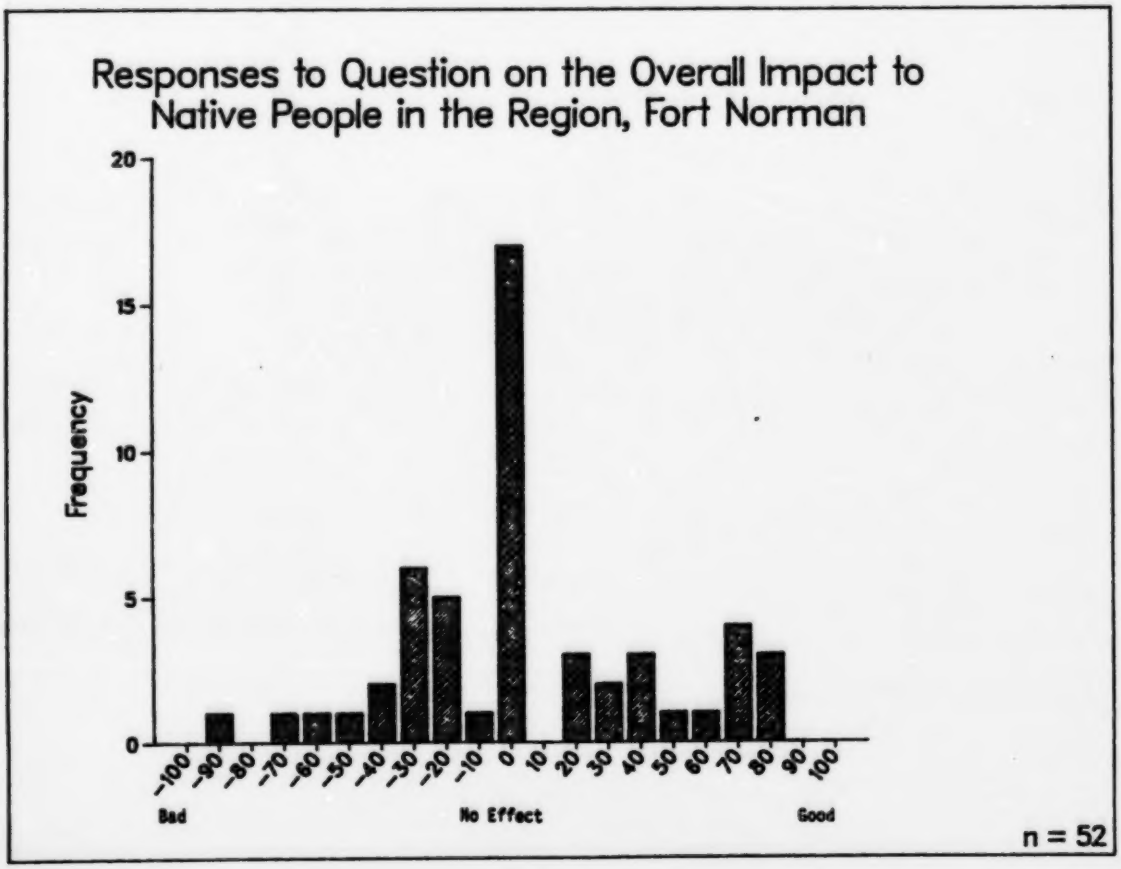


Over 23% of the respondents in Norman Wells marked +100 for the overall social and economic impact of the Norman Wells Project on native people in the region. This skewed response is clearly the dominant feature of Figure 7.

Fort Norman

The residents of Fort Norman generally seem to feel that the Norman Wells Project has had little impact, good or bad, on native people in the region. One-third of the respondents indicated that the Norman Wells Project had "no effect" (Figure 8). The remainder of the respondents are evenly split between those feeling the project had a good effect and those feeling it had a bad effect.

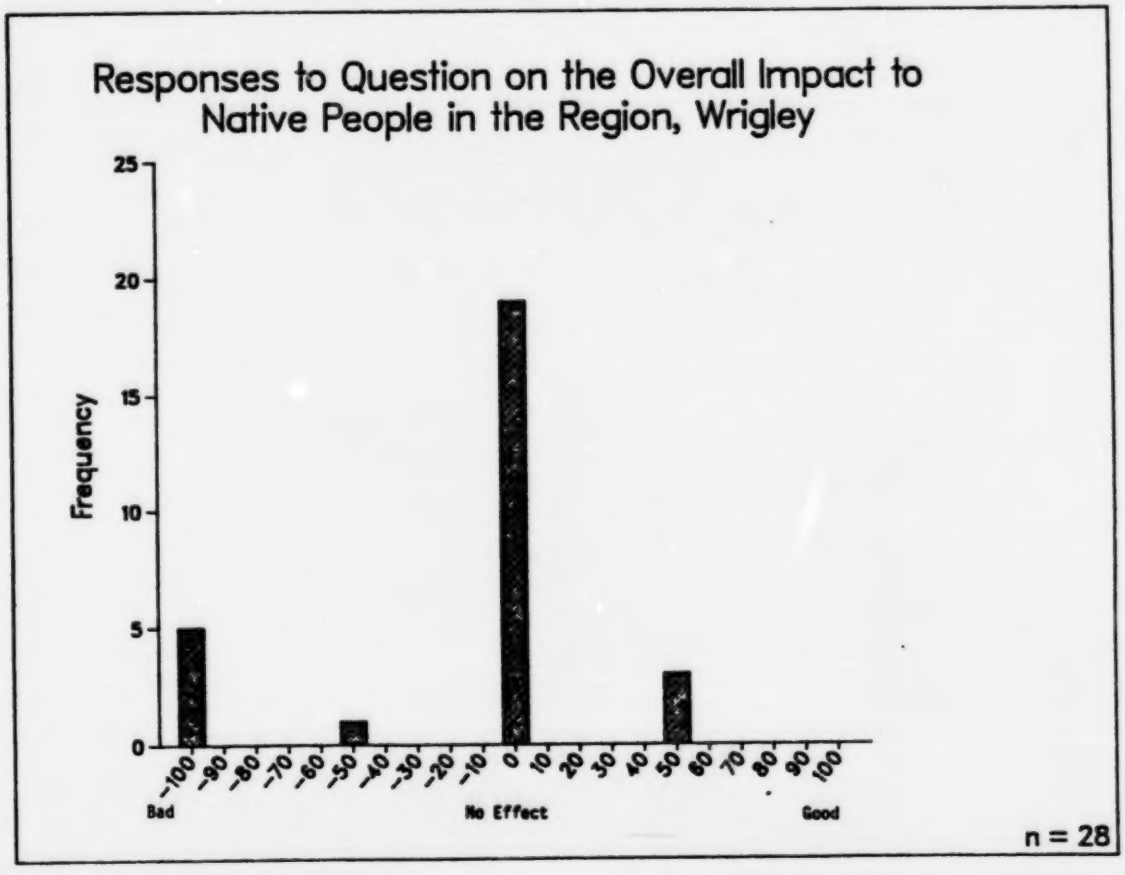
Figure 8


Responses to Question on the Overall Impact to Native People in the Region, Fort Norman
Frequency
20
15
10
5
0
-100 -90 -80 -70 -60 -50 -40 -30 -20 -10 0 10 20 30 40 50 60 70 80 90 100
Bad
No Effect
Good
n = 52

Wrigley

It is apparent that most of the residents of Wrigley felt that there was no effect on native people in the region as a result of the Norman Wells Project (Figure 9).

Figure 9

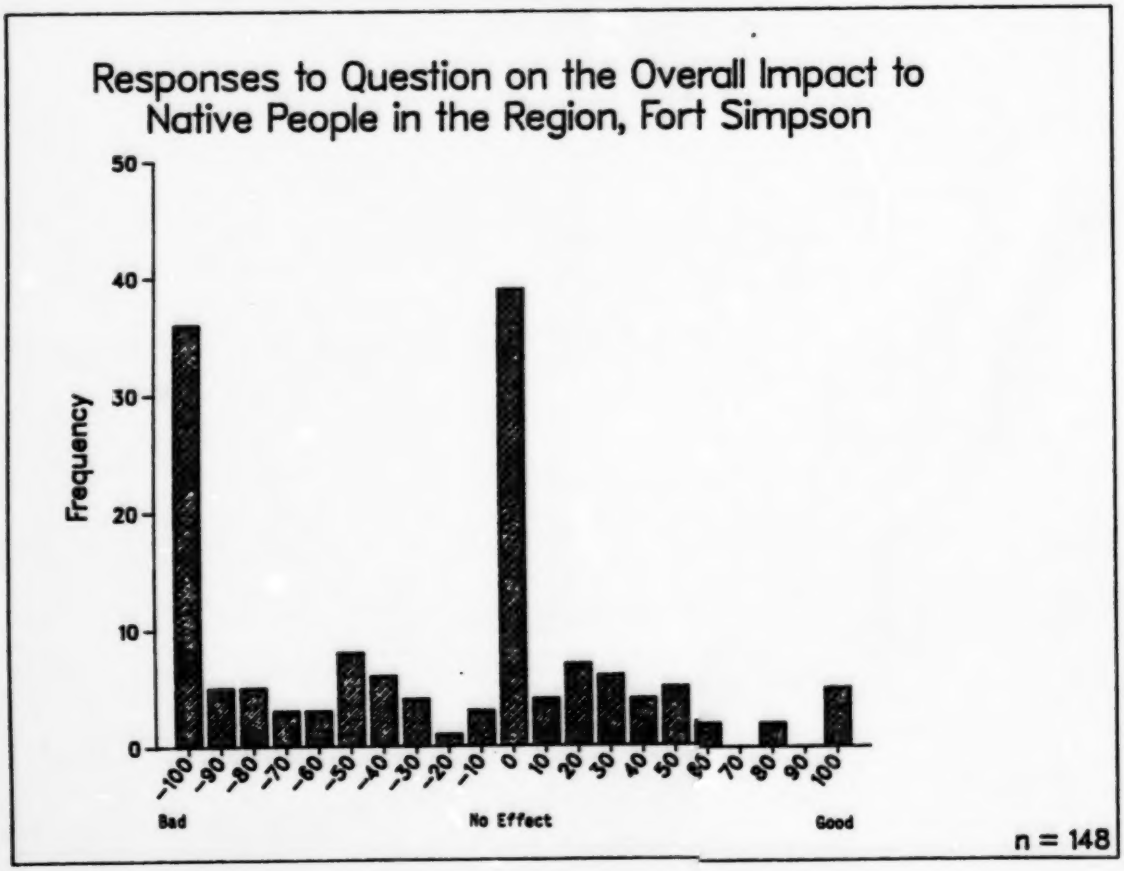


There are a few respondents in Wrigley who felt that the project was quite bad for natives as well.

Fort Simpson

In Fort Simpson there is a dichotomy of views towards the impact of the Norman Wells Project on native people (Figure 10). Over 26% of the heads of households felt that overall there was no effect on native people. But nearly the same number (24%) suggested the project was "bad" for native people.

Figure 10



This situation is opposite to the perceived social impacts on

Fort Simpson where a significant portion of the respondents felt the project was "good" for the community. Also, 95% of the respondents suggesting the project was "bad" for natives were natives.

Overall, it is clear that the residents of Norman Wells felt that the Norman Wells Project had a good impact on native people. Residents in Fort Norman and Wrigley do not perceive the Norman Wells Project to have had much of an impact on native people in the region. Fort Simpson respondents are split on the overall impact of the project with some feeling it had little impact on native people and some feeling it was bad for natives in the region.

3.2 Specific Potential Social and Economic Impacts

Similar to the social impact question discussed in the previous section, the second part of the question on overall impacts to the native people in the region provided ten potential impacts for the respondents to rate. Six of the potential impact areas were negative and four were positive impact areas. The respondents were asked to indicate whether the following impact areas had had a (1) strong effect; (2) some effect; (3) no effect; or (4) decreased effect on the native people of the Central Mackenzie Valley:

1. Native way of life disrupted.

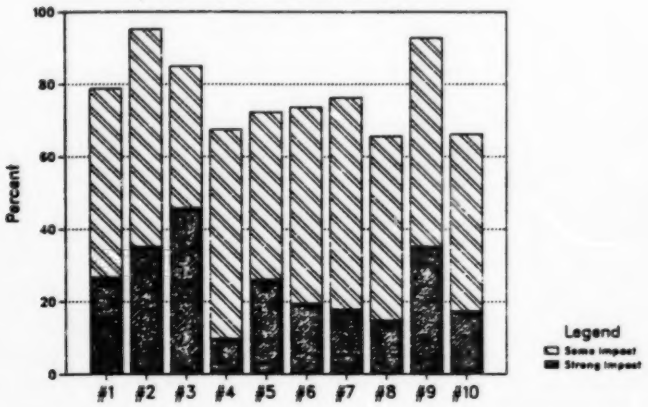
2. Provided jobs/improved Native economy.
3. Increased alcohol/drug abuse.
4. Improved relationship between Native/Non-Native.
5. Boom and bust/no long term benefits.
6. Increased family problems/breakdown.
7. Encouraged long term development.
8. Increased crime.
9. Provided job experience/training.
10. Increased Native/Non-Native conflict.

As well as these ten, space was provided for any impacts the respondents wished to write in. The responses to this question for the four study communities are provided in Figures 11 and 12. The overall heights of the bars indicate the percentage of households which felt that a particular impact area had had an impact on native people. The more darkly shaded area indicates the percentage of respondents feeling that this was a strong impact on natives in the region.

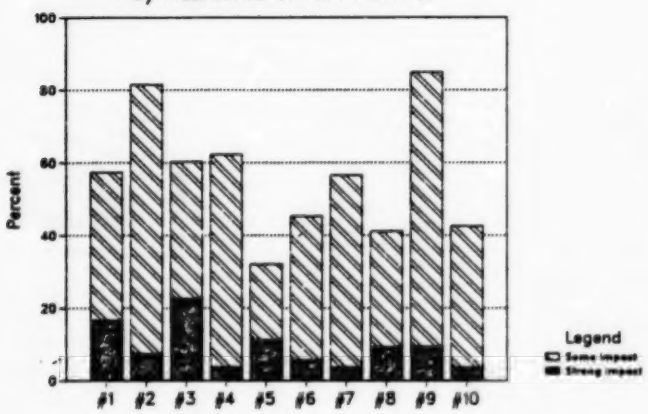
Significantly, respondents in each community perceived much higher levels of impacts to natives in the region than when asked the general social impacts to their community. In Norman Wells, three impact areas were identified by more than 80% of the households as having occurred to native people as a result of construction of the Norman Wells Project. The highest two, over 90%, were positive economic impacts relating to (1) providing jobs and improving the native economy and (2) providing job

Figure 11

Perceived Impacts to Native People
by Residents of Norman Wells



Perceived Impacts to Native People
by Residents of Fort Norman

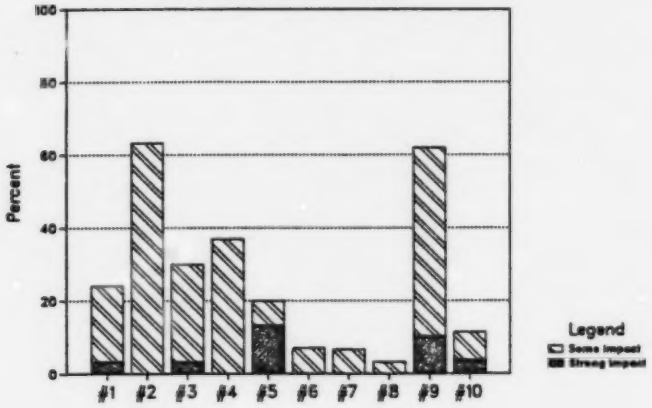


LEGEND FOR IMPACT TO NATIVE PEOPLE
BY CONSTRUCTION OF THE N.W.P.

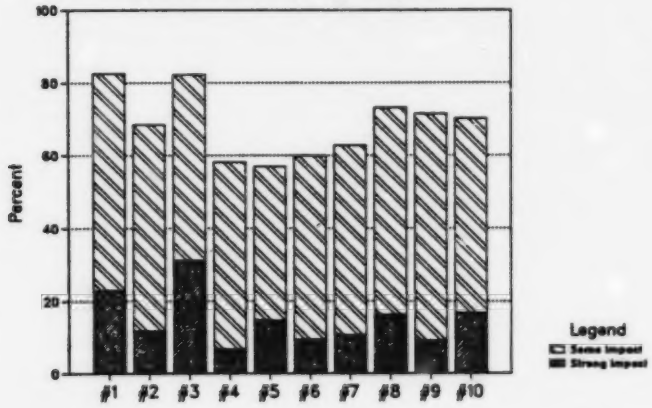
#1 Native way of life disrupted.
#2 Provided jobs/improved Native economy.
#3 Increased alcohol/drug abuse.
#4 Improved relationship between Native/Non-Native
#5 Boom and bust/no long term benefits.
#6 Increased family problems/breakdown.
#7 Encouraged long term development.
#8 Increased crime.
#9 Provided job experience/training.
#10 Increased Native/Non-Native conflict.

Figure 12

Perceived Impacts to Native People
by Residents of Wrigley



Perceived Impacts on Native People
by Residents of Fort Simpson



LEGEND FOR IMPACT TO NATIVE PEOPLE
BY CONSTRUCTION OF THE N.W.P.

#1 Native way of life disrupted.
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#6 Increased family problems/breakdown.
#7 Encouraged long term development.
#8 Increased crime.
#9 Provided job experience/training.
#10 Increased Native/Non-Native conflict.

experience and training. The third highest area was increased alcohol and drug abuse among natives. This area was identified as the strongest impact area with 46% of the households identifying alcoholism as a strong impact. As indicated in Figure 11 all ten impact areas were identified by over 60% of the residents as having occurred to native people. The reason that Norman Wells respondents perceived greater impacts of the project to the native people may relate to the fact that the community was exposed to the greatest amount of project activity for much longer periods of time than the other three communities. For this reason the residents were also exposed to, and possibly more aware of, the benefits and costs of the project for native people for longer periods of time.

The residents of Fort Simpson also perceived many project impacts on native people. All ten areas of impact were identified as having been an impact of the project by over 50% of the households. However, the residents of Fort Simpson identified two negative social impacts as the strongest impacts of the Norman Wells Project. The disruption of the native way of life was identified by 83% of the respondents as an impact of the project. Somewhat surprisingly, Fort Simpson was the only community that identified this impact as one of the stronger resulting from the project. Increased alcoholism was the second highest with 82% of the households suggesting it as an impact.

Fort Norman respondents, like Norman Wells, identified the two economic impacts relating to native employment and economy as being the most prevalent impacts on native people in the region. Approximately 85% of the households suggested job experience and training had either a strong or some effect on native people. Over 81% felt the provision of jobs and improvment of the native economy were effects of the project on natives. In the strong impact category, alcoholism again was identified as number one by Fort Norman residents with 23% of the residents responding that alcohol and drug abuse was a strong effect of the Norman Wells Project.

Wrigley respondents follow the pattern seen in Norman Wells and Fort Norman. The economic impacts, providing jobs and improving the native economy (63%) and providing job experience and training (62%), were identified by the greatest proportion of households as impacts of the construction of the Norman Wells Project. None of the other potential impact areas were identified by more than 40% of the households (Figure 12). It is clear that overall the respondents in Wrigley perceived fewer impacts on native people than the respondents in the other three communities. In terms of strong effects of the project, "the boom and bust conditions" and "no long term benefits" were seen as having a strong effect on natives in the region by 13% of the residents of Wrigley.

4. CONCLUSIONS

In this report the perceptions of the residents of the four study communities towards the impacts of the Norman Wells Project on social conditions in the communities and overall social and economic impacts on native people have been examined. This report is not a report on objectively measured impacts but rather the impacts of the Norman Wells Project as perceived by the residents of the four study communities. The major findings of this report are as follows:

1. The residents of Norman Wells perceived the "net" social impact of the Norman Wells Project to be good for their community. Specifically, they identified improved community facilities or services, more transients and increased alcohol and drug abuse as the strongest areas of impacts.

2. Fort Norman and Wrigley residents felt that overall the project had little "net" impact on the social conditions in their community. The provision of job experience/training and increased alcohol/drug abuse were the two specific areas of impacts which were identified as having some impact.

3. Fort Simpson respondents also perceived the Norman Wells Project to have little "net" impact on the social conditions of their community. Increased alcohol and drug abuse was again identified as the strongest specific area of social impact.

4. Norman Wells residents felt that the Norman Wells Project was good overall, economically and socially, for natives in the region. Fort Norman and Wrigley residents felt there was little "net" effect on native people while the residents of Fort Simpson were split between feeling the project had no effect on natives and perceiving it to be bad for natives in the region.

5. In Norman Wells, Fort Norman and Wrigley the two strongest specific areas of impacts which were identified were the two economic areas relating to

jobs and improving the native economy and to job experience and training.

6. The strongest negative impacts upon natives in the region which were identified by the residents in the four communities related to increased alcohol and drug abuse among natives and disruption of the native way of life.

8. REFERENCES

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Appendix A

Table 1(a) Responses to Specific Areas of Social Impacts of the Norman Wells Project

	Norman Wells				Fort Norman			
	#1	#2	#3	#4	#1	#2	#3	#4
Incr. Alcohol/Drug Abuse	47.1	38.6	14.3	0.0	29.3	41.4	29.3	0.0
Impr. Facilities/Services	33.8	54.0	10.8	1.4	1.8	31.6	64.9	1.8
Incr. Family Problems/Breakdown	21.2	48.2	29.9	0.7	3.5	42.1	54.4	0.0
Provided Job Experiance/Training	34.3	45.3	18.2	2.2	16.1	69.6	14.3	0.0
More Transients	72.1	22.9	4.3	0.7	1.8	14.3	83.9	0.0
Increased Crime	15.9	47.1	36.2	0.7	12.3	21.1	66.7	0.0
Incr. # of Permanent Residents	28.1	56.1	13.7	2.2	0.0	9.1	90.9	0.0
Overused Community Facilities	29.2	37.2	32.8	0.7	0.0	5.5	92.7	0.0

Table 1(b) Responses to Specific Areas of Social Impacts of the Norman Wells Project

	Wrigley				Fort Simpson			
	#1	#2	#3	#4	#1	#2	#3	#4
Incr. Alcohol/Drug Abuse	6.7	26.7	66.7	0.0	31.8	48.3	19.9	0.0
Impr. Facilities/Services	3.3	13.3	80.0	3.3	9.7	50.6	38.6	1.1
Incr. Family Problems/Breakdown	0.0	6.9	93.1	0.0	11.5	39.1	47.1	2.3
Provided Job Experiance/Training	0.0	70.0	23.3	6.7	10.8	59.1	27.8	2.3
More Transients	6.7	10.9	83.3	0.0	22.0	50.9	25.4	1.7
Increased Crime	3.3	3.3	93.3	0.0	19.5	47.1	32.8	0.6
Incr. # of Permanent Residents	0.0	3.3	96.7	0.0	7.4	68.4	22.9	1.7
Overused Community Facilities	3.4	6.9	89.7	0.0	4.6	48.6	46.3	0.6

Comment: These figures represent the percentage of households which perceived these areas of specific social impacts as having: #1 a strong effect, #2 some effect, #3 no effect or #4 a decreased effect.

Table 2(a) Responses to Specific Areas of Impacts to Native Peoples by the Construction of the Norman Wells Project

	Norman Wells				Fort Norman			
	#1	#2	#3	#4	#1	#2	#3	#4
Native Way of Life Disrupted	26.8	52.0	20.3	0.8	16.7	40.7	42.6	0.0
Provided Jobs/Impr. Native Econ.	35.2	60.0	4.0	0.8	7.4	74.1	16.7	1.9
Increased Alcohol/Drug Abuse	45.8	39.2	15.0	0.0	22.6	37.7	37.7	1.9
Impr. Nat./Non-Nat. Relationship	9.8	57.7	17.1	15.4	3.8	58.5	35.8	1.9
Boom and Bust/No Long Term Bnfts.	26.1	46.2	25.2	2.5	11.3	20.8	64.2	3.8
Incr. Family Problems/Breakdown	19.5	54.2	24.6	1.7	5.7	39.6	54.7	0.0
Encouraged Long Term Development	17.8	58.5	22.0	1.7	3.8	52.8	43.4	0.0
Increased Crime	14.8	50.8	34.4	0.0	9.3	31.5	59.3	0.0
Provided Job Experience/Training	35.2	57.6	6.4	0.8	9.4	75.5	15.1	0.0
Increased Nat./Non-Nat. Conflict	17.4	48.8	31.4	2.5	3.3	38.9	57.4	0.0

Table 2(b) Responses to Specific Areas of Impacts to Native Peoples by the Construction of the Norman Wells Project

	Wrigley				Fort Simpson			
	#1	#2	#3	#4	#1	#2	#3	#4
Native Way of Life Disrupted	3.4	20.7	72.4	3.4	23.0	59.6	16.8	0.6
Provided Jobs/Impr. Native Econ.	0.0	63.3	26.7	10.0	11.7	56.8	27.2	4.3
Increased Alcohol/Drug Abuse	3.3	26.7	70.0	0.0	31.1	51.2	16.5	1.2
Impr. Nat./Non-Nat. Relationship	0.0	37.0	63.0	0.0	6.7	51.5	32.1	9.7
Boom and Bust/No Long Term Bnfts.	13.3	6.7	76.7	3.3	14.7	42.3	39.9	3.1
Incr. Family Problems/Breakdown	0.0	7.1	92.9	0.0	9.4	50.6	37.5	2.5
Encouraged Long Term Development	0.0	6.7	93.3	0.0	10.6	52.2	32.2	5.0
Increased Crime	0.0	3.3	96.7	0.0	16.3	56.9	26.3	0.6
Provided Job Experience/Training	10.3	51.7	34.5	3.4	9.1	62.4	20.0	8.5
Increased Nat./Non-Nat. Conflict	3.8	7.7	88.5	0.0	16.8	53.4	24.2	5.6

Comment: These figures represent the percentage of households which perceived these specific areas of impact as having: #1 a strong effect, #2 some effect, #3 no effect or #4 a decreased effect.